```
Gln His Leu Lys Arg Val Gln Leu Arg Glu Leu Ser Glu Ala Glu Val
625             630             635             640

Arg Gln His Arg Glu Ala Arg Pro Ala Leu Leu Thr Ser Arg Leu Arg
            645             650             655

Phe Ile Pro Lys Pro Asp Gly Leu Arg Pro Ile Val Asn Met Asp Tyr
            660             665             670

Val Val Gly Ala Arg Thr Phe Arg Arg Glu Lys Arg Ala Glu Arg Leu
            675             680             685

Thr Ser Arg Val Lys Ala Leu Phe Ser Val Leu Asn Tyr Glu Arg Ala
    690             695             700

Arg Arg Pro Gly Leu Leu Gly Ala Ser Val Leu Gly Leu Asp Asp Ile
705             710             715             720

His Arg Ala Trp Arg Thr Phe Val Leu Arg Val Arg Ala Gln Asp Pro
            725             730             735

Pro Pro Glu Leu Tyr Phe Val Lys Val Asp Val Thr Gly Ala Tyr Asp
            740             745             750

Thr Ile Pro Gln Asp Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys
            755             760             765

Pro Gln Asn Thr Tyr Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala
    770             775             780

Ala His Gly His Val Arg Lys Ala Phe Lys Ser His Val Leu Arg Pro
785             790             795             800

Val Pro Gly Asp Pro Ala Gly Leu His Pro Leu His Ala Ala Leu Gln
            805             810             815

Pro Val Leu Arg Arg His Gly Glu Gln Ala Val Cys Gly Asp Ser Ala
            820             825             830

Gly Arg Ala Ala Pro Ala Phe Gly Gly
            835             840


<210> 61
<211> 756
<212> PRT
<213> Homo sapiens

<220>
<223> Truncated Protein 2 (ver.2); encoded by SEQ ID
      NO:59 with Intron Y ORF2 after the termination
      codon

<400> 61
Gly Arg Pro Gly Gly Thr Ser Asp Met Arg Arg Ala Ala Gln Ala Thr
 1               5               10              15

Gln Gly Ala Ser Pro Ala Gly Ser Cys Leu Lys Glu Leu Val Ala Arg
```

```
Thr Phe Val Leu Arg Val Arg Ala Gln Asp Pro Pro Pro Glu Leu Tyr
            645             650             655

Phe Val Lys Val Asp Val Thr Gly Ala Tyr Asp Thr Ile Pro Gln Asp
            660             665             670

Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys Pro Gln Asn Thr Tyr
        675             680             685

Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala Ala His Gly His Val
    690             695             700

Arg Lys Ala Phe Lys Ser His Val Leu Arg Pro Val Pro Gly Asp Pro
705             710             715             720

Ala Gly Leu His Pro Leu His Ala Ala Leu Gln Pro Val Leu Arg Arg
            725             730             735

His Gly Glu Gln Ala Val Cys Gly Asp Ser Ala Gly Arg Ala Ala Pro
            740             745             750

Ala Phe Gly Gly
        755
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<210> 62
<211> 841
<212> PRT
<213> Homo sapiens

<220>
<223> Truncated Protein 2 (ver.2); encoded by SEQ ID NO:
     59 with Intron Y ORF3

<400> 62
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Met Pro Arg Ala Pro Arg Cys Arg Ala Val Arg Ser Leu Leu Arg Ser
 1               5               10              15

His Tyr Arg Glu Val Leu Pro Leu Ala Thr Phe Val Arg Arg Leu Gly
            20              25              30

Pro Gln Gly Trp Arg Leu Val Gln Arg Gly Asp Pro Ala Ala Phe Arg
        35              40              45

Ala Leu Val Ala Gln Cys Leu Val Cys Val Pro Trp Asp Ala Arg Pro
    50              55              60

Pro Pro Ala Ala Pro Ser Phe Arg Gln Val Pro Pro Arg Gly Arg Arg
65              70              75              80

Pro Ala Gly Val Glu Gly Gly Arg Gly Glu Pro Ala Thr Cys Gly Glu
            85              90              95

Gln Arg Arg Arg Leu Arg Ala Leu Pro Pro Gln Val Ser Cys Leu Lys
            100             105             110

Glu Leu Val Ala Arg Val Leu Gln Arg Leu Cys Glu Arg Gly Ala Lys
        115             120             125
```

```
              740                    745                    750
Thr Ile Pro Gln Asp Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys
        755                    760                    765

Pro Gln Asn Thr Tyr Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala
    770                    775                    780

Ala His Gly His Val Arg Lys Ala Phe Lys Ser His Val Leu Arg Pro
785                    790                    795                    800

Val Pro Gly Asp Pro Ala Gly Leu His Pro Leu His Ala Ala Leu Gln
                805                    810                    815

Pro Val Leu Arg Arg His Gly Glu Gln Ala Val Cys Gly Asp Ser Ala
            820                    825                    830

Gly Arg Ala Ala Pro Ala Phe Gly Gly
        835                    840
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<210> 63
<211> 3500
<212> DNA
<213> Homo sapiens

<220>
<223> Reference Protein (ver.2); with Introns Y, Alpha
      and Beta

<400> 63
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cgcggggacc cggcggcttt ccgcgcgctg gtggcccagt gcctggtgtg cgtgccctgg 180
gacgcacggc cgcccccgc cgcccctcc ttccgccagg tgggcctccc cggggtcggc 240
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gactcagggc gcttcccccg caggtgtcct gcctgaagga gctggtggcc cgagtgctgc 360
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gcttcctcag gaacaccaag aagttcatct ccctggggaa gcatgccaag ctctcgctgc 1620
```

```
Glu Leu Tyr Phe Val Lys Val Asp Val Thr Gly Ala Tyr Asp Thr Ile
705             710             715             720

Pro Gln Asp Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys Pro Gln
                725             730             735

Asn Thr Tyr Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala Ala His
                740             745             750

Gly His Val Arg Lys Ala Phe Lys Ser His Val Leu Arg Pro Val Pro
            755             760             765

Gly Asp Pro Ala Gly Leu His Pro Leu His Ala Ala Leu Gln Pro Val
        770             775             780

Leu Arg Arg His Gly Glu Gln Ala Val Cys Gly Asp Ser Ala Gly Arg
785             790             795             800

Ala Ala Pro Ala Phe Gly Gly
                805


<210> 40
<211> 3396
<212> DNA
<213> Homo sapiens

<220>
<223> Reference Telomerase; with Intron Alpha and Beta

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cgcggggacc cggcggcttt ccgcgcgctg gtgcccagt gcctggtgtg cgtgccctgg 180
gacgcacggc cgcccccgc cgccccctcc ttccgccagg tgtcctgcct gaaggagctg 240
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agctacctgc ccaacacggt gaccgacgca ctgcggggga cggggcgtg ggggctgctg 420
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